

CLAIM AMENDMENTS

Please replace the pending claims with the following claim listing:

1. (Currently Amended) An optical medium ~~consists of~~ comprising a cubic crystal material, ~~said optical medium being characterized in that:~~ said crystal material ~~[[is]]~~ comprising $\alpha\beta\text{O}_3$, where α is at least one of K, Ba, Sr, Ca, and β is at least one of Ta, Ti.

2. (Currently Amended) An optical medium ~~consists of~~ comprising a cubic crystal material, ~~said optical medium being characterized in that:~~ said crystal material ~~[[is]]~~ comprises KTaO_{3-d} , where the amount of oxygen deficiency d is $0 \leq d < 10^{-7}$.

3. (Currently Amended) An optical medium ~~consists of~~ comprising a cubic crystal material, ~~said optical medium being characterized in that:~~ said crystal material ~~[[is]]~~ comprises $\text{KTa}_{1-x}\text{Nb}_x\text{O}_3$, where composition x is $0 \leq x \leq 0.35$.

4. (Currently Amended) An optical medium ~~consists of~~ comprising a cubic crystal material, ~~said optical medium being characterized in that:~~ said crystal material ~~[[is]]~~ comprises $\text{K}_{1-y}\text{Li}_y\text{TaO}_3$, where composition y is $0 \leq y \leq 0.02$.

5. (Currently Amended) An optical medium ~~consists of~~ comprising a cubic crystal material, ~~said optical medium being characterized in that:~~ said crystal material ~~[[is]]~~ comprises $\text{K}_{1-y}\text{Li}_y\text{Ta}_{1-x}\text{Nb}_x\text{O}_3$, where composition x is $0 \leq x \leq 0.35$ and y is $0 \leq y \leq 0.02$.

6. (Currently Amended) An optical lens ~~characterized by~~ comprising:
a cubic crystal material ~~consisting of~~ comprising $\alpha\beta\text{O}_3$, where α is at least one of K, Ba, Sr, Ca, and β is at least one of Ta, Ti; and
a refractive index of more than 2.2 in the wavelength range of 360nm-800nm, and
a transmission of 80% or more with a 10mm thickness.
7. (Currently Amended) An optical lens according to Claim 6, wherein said cubic crystal ~~comprises~~ comprises KTaO_{3-d} , where the amount of oxygen deficiency d is $0 \leq d < 10^{-7}$.
8. (Currently Amended) An optical lens according to Claim 6, wherein said cubic crystal ~~comprises~~ comprises $\text{KTa}_{1-x}\text{Nb}_x\text{O}_3$, where composition x is $0 \leq x \leq 0.35$.
9. (Currently Amended) An optical lens according to Claim 6, wherein said cubic crystal ~~comprises~~ comprises $\text{K}_{1-y}\text{Li}_y\text{TaO}_3$, where composition y is $0 \leq y \leq 0.02$.
10. (Currently Amended) An optical lens according to Claim 6, wherein said cubic crystal ~~comprises~~ comprises $\text{K}_{1-y}\text{Li}_y\text{Ta}_{1-x}\text{Nb}_x\text{O}_3$, where composition x is $0 \leq x \leq 0.35$ and y is $0 \leq y \leq 0.02$.

11. (Currently Amended) An optical prism ~~characterized by~~ comprising:

a cubic crystal material ~~consisting of~~ comprising $\alpha\beta\text{O}_3$, where α is at least one of

K, Ba, Sr, Ca, and β is at least one of Ta, Ti; and

a refractive index of more than 2.2 in the wavelength range of 360nm-800nm, and

a transmission deterioration of 1% or less under a 10-minute irradiation with an irradiation intensity of $2.2\text{W}/\text{cm}^2$.

12. (Currently Amended) A prism according to Claim 11, wherein said cubic crystal

[[is]] comprises KTaO_{3-d} , where the amount of oxygen deficiency d is $0 \leq d < 10^{-7}$.

13. (Currently Amended) A prism according to Claim 11, wherein said cubic crystal

[[is]] comprises $\text{KTa}_{1-x}\text{Nb}_x\text{O}_3$, where composition x is $0 \leq x \leq 0.35$.

14. (Currently Amended) A prism according to Claim 11, wherein said cubic crystal

[[is]] comprises $\text{K}_{1-y}\text{Li}_y\text{TaO}_3$, where composition y is $0 \leq y \leq 0.02$.

15. (Currently Amended) A prism according to Claim 11, wherein said cubic crystal

[[is]] comprises $\text{KTa}_{1-x}\text{Nb}_x\text{O}_3$, where composition x is $0 \leq x \leq 0.35$.